

REMARKS

Claims 1, 2 and 6 are pending. Claim 1 is amended by deleting subject matter. No new matter has been added.

Claims 1, 2, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent No. 6,270,948) in view of Masataka et al. (WO 02/21586 A1). (Office Action, p. 2)

Claim 1 is now limited to perfluoro-2-pentyne etching gas. Sato and Masataka Hirose et al. (WO 02/21586; US Publication 2004/0011763; US Serial No. 10/362,973) nowhere disclose or teach this etching gas. The Office Action on p.3 admits that Sato fails to teach perfluoro-2-pentyne and that Masataka teaches "2-Pentene, 1,1,1,2,4,4,5,5,5-nonafluoro)" with no mention of disclosing perfluoro-2-pentyne, which it does not. Thus, even if Sato's etching gas is modified with Masataka Hirose et al's etching gas, the claimed subject matter would not be realized.

Without any disclosure of the claimed gas used for the claimed method, it would not be possible for the art skilled person to first derive from Sato and Masataka Hirose et al the perfluoro-2-pentyne and then derive the claimed method of irradiating a substrate with a resist film formed thereon with radiation having a wavelength of not more than 195 nm to form a resist pattern having a minimum line width of not more than 200 nm, and subjecting the substrate having the resist pattern formed thereon to dry etching using, an etching gas perfluoro-2-pentyne.

The combination of the references, without more, simply cannot make obvious the invention as now claimed. It is respectfully requested that the rejection be reconsidered and withdrawn.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent No. 6,270,948) in view of Masataka et al. (WO 02/21586 A1) as applied to claims 1, 2, and 7 above, and further in view of Collins et al. (U.S. Patent No. 5,556,501). (Office Action p. 3)

Collins et al. is cited for disclosing a domed plasma reactor chamber that uses an antenna driven by RF energy which is inductively coupled inside the reactor dome to generate a high density, low energy plasma inside the chamber for etching materials, dielectrics, and semiconductor materials. (Collins et al., Abstract) Even though Collins discloses a plasma density in a specific working example, Collins does not make up for the deficiencies of Sato and Masataka Hirose et al. Furthermore Collins nowhere discloses perfluoro-2-pentyne. Thus Collins, in combination with Sato and Masataka Hirose et al., fails to teach or suggest the invention as now claimed.

It is respectfully requested that this rejection be reconsidered and withdrawn.

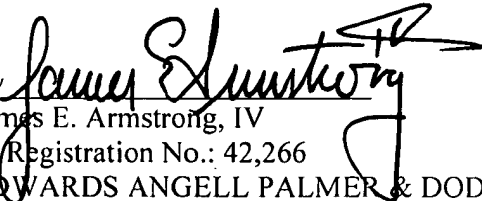
The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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